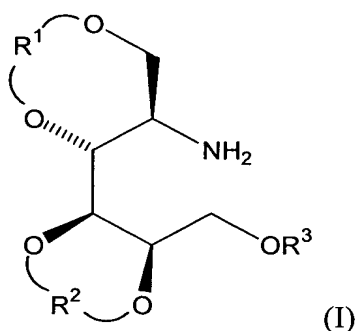


CLAIM AMENDMENTS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Previously Presented) A process for preparing a compound of formula (I), or a salt thereof:



where R¹ and R² are each independently protecting groups which, together with the oxygen atoms to which they are attached, form part of a dioxane or dioxolane ring; and R³ is hydrogen or a protecting group;

including the steps of:

- protecting the hydroxyl group at the C-6 position of *N*-acetyl-D-mannosamine, to give a 6-*O*-protected-*N*-acetyl-D-mannosamine, wherein the hydroxyl protecting group at the C-6 position is selected from the group consisting of a silyl group, a benzyl group, or an ester group;
- reducing the C-1 anomeric carbon atom of the 6-*O*-protected-*N*-acetyl-D-mannosamine using a reducing agent selected from the group consisting of a metal hydride reducing agent or hydrogen gas/metal catalyst to give a 6-*O*-protected-*N*-acetyl-D-mannitol;
- protecting the four hydroxyl groups of the 6-*O*-protected-*N*-acetyl-D-mannitol with protecting groups R¹ and R² as defined above;
- removing the *N*-acetyl protecting group using basic conditions and optionally removing the C-6 oxygen atom protecting group using basic conditions to give the compound of formula (I).

2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Previously Presented) A process according to claim 1 where 2,2-dimethoxypropane in the presence of acetone is used to protect the four hydroxyl groups of the 6-*O*-protected-*N*-acetyl-*D*-mannitol in step (c), to give a 1:3,4:5-di-*O*-isopropylidene-*D*-mannitol.
9. (Previously Presented) A process according to claim 1 where both the *N*-acetyl protecting group and the C-6 oxygen atom protecting group are removed in step (d).
10. (Canceled)
11. (Previously Presented) A process according to claim 1 further comprising:
 - (e) oxamoylation of the compound of formula (I) to give a 2-oxamoylamino-*D*-mannitol;
 - (f) removal of the R³ protecting group using basic conditions, where R³ is not H;
 - (g) oxidation of the C-6 carbon atom to give a 2-oxamoylamino-*D*-mannose;
 - (h) double cyclisation of the 2-oxamoylamino-*D*-mannose using a methanolic ammonia solution to give kifunensine with four protected hydroxyl groups; and
 - (i) removal of the four hydroxyl protecting groups using acidic conditions to give kifunensine.

12. (Canceled)
13. (Canceled)
14. (Original) A process according to claim 11 where oxamic acid and 1,1'-carbonyldiimidazole are used for the oxamoylation of the compound of formula (I) in step (e).
15. (Original) A process according to claim 11 where the oxamoylation step (e) is a direct coupling of the compound of formula (I) with ethyl oxamate, oxalic acid mono-n-butyl ester or di-n-butyl oxalate.
16. (Original) A process according to claim 11 where pyridinium dichromate in the presence of activated molecular sieves and pyridinium trifluoroacetate is used for the oxidation of the C-6 carbon atom in step (g).
17. (Original) A process for preparing kifunensine including the steps of:
 - (a) silylation of *N*-acetyl-D-mannosamine using *tert*-butyldiphenylsilyl chloride as silylating agent, to give 6-*O-tert*-butyldiphenylsilyl-2-deoxy-2-acetylamino-D-mannose;
 - (b) reduction of 6-*O-tert*-butyldiphenylsilyl-2-deoxy-2-acetylamino-D-mannose using sodium borohydride as reducing agent, to give 6-*O-tert*-butyldiphenylsilyl-2-deoxy-2-acetylamino-D-mannitol;
 - (c) protection of the four hydroxy groups of 6-*O-tert*-butyldiphenylsilyl-2-deoxy-2-acetylamino-D-mannitol using 2,2-dimethoxypropane in the presence of acetone, to give 6-*O-tert*-butyldiphenylsilyl-2-deoxy-1,3:4,5-di-*O*-isopropylidene-2-acetylamino-D-mannitol;
 - (d) double deprotection of the 6-*O*- and *N*-protecting groups of 6-*O-tert*-butyldiphenylsilyl-2-deoxy-1,3:4,5-di-*O*-isopropylidene-2-acetylamino-D-mannitol using aqueous barium hydroxide, to give 2-amino-2-deoxy-1,3:4,5-di-*O*-isopropylidene-D-mannitol;

- (e) oxamoylation of 2-amino-2-deoxy-1,3:4,5-di-*O*-isopropylidene-D-mannitol using oxamic acid and 1,1'-carbonyldiimidazole, to give 2-deoxy-1,3:4,5-di-*O*-isopropylidene-2-oxamoylamino-D-mannitol;
- (f) oxidation of 2-deoxy-1,3:4,5-di-*O*-isopropylidene-2-oxamoylamino-D-mannitol using pyridinium dichromate in the presence of activated molecular sieves and pyridinium trifluoroacetate, to give 5-deoxy-2,3:4,6-di-*O*-isopropylidene-2-oxamoylamino-D-mannose;
- (g) double cyclisation of 5-deoxy-2,3:4,6-di-*O*-isopropylidene-2-oxamoylamino-D-mannose using a methanolic ammonia solution, to give 2,3:4,6-di-*O*-isopropylidene-kifunensine; and
- (h) deprotection of 5,6:7,8-di-*O*-isopropylidene-kifunensine, using methanolic hydrochloric acid, to give kifunensine.

18. (Canceled)

19. (Previously Presented) A process according to claim 1 where the hydroxyl protecting group at the C-6 position of *N*-acetyl-D-mannosamine in step (a) is a silyl protecting group.

20. (Previously Presented) A process according to 19 where the silyl protecting group is *tert*-butyldiphenylsilyl.

21. (Previously Presented) A process according to claim 1 where the basic conditions in step (d) are selected from aqueous barium hydroxide or sodium *n*-butoxide in *n*-butanol.

22. (Previously Presented) A process according to claim 11 where the basic conditions in step (f) are selected from aqueous barium hydroxide or sodium *n*-butoxide in *n*-butanol.

23. (Previously Presented) A process according to claim 11 where the acidic conditions in step (i) are selected from methanolic hydrochloric acid or trifluoroacetic acid.

24. (New) A process according to claim 1 further comprising:
- (e) removal of the R^3 protecting group using basic conditions, where R^3 is not H;
 - (f) oxamoylation of the compound of formula (I) to give a 2-oxamoylamino-D-mannitol;
 - (g) oxidation of the C-6 carbon atom to give a 2-oxamoylamino-D-mannose;
 - (h) double cyclisation of the 2-oxamoylamino-D-mannose using a methanolic ammonia solution to give kifunensine with four protected hydroxyl groups;
and
 - (i) removal of the four hydroxyl protecting groups using acidic conditions to give kifunensine.